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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/981,064	10/16/2001	Henry Aoki	495P009	5693

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EXAMINER	
JOYNES, ROBERT M	
ART UNIT	PAPER NUMBER
1615	

DATE MAILED: 05/07/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/981,064	AOKI, HENRY	
	Examiner	Art Unit	
	Robert M. Joynes	1615	

-- The MAILING DATE of this communication appears on th cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____ .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-20 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-20 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other:

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1-3, 7-9 and 11-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kuboyama (US 5558006) in combination with Howland et al. (US 4045586). Kuboyama teaches a method extracting from a raw material an extract by heating water at a predetermined temperature (Col. 5, lines 1-29), atomizing the heated water (Col. 5, lines 19-29), contacting the raw material under state of decompression with the heated and atomized water particles (Col. 5, lines 30-51), condensing the resulting water particles (Col. 5, lines 52-62) and collecting the cooled water (Col. 5, lines 52-62). The reference further teaches that the cooling chamber comprises cooling plates within a cylinder of the chamber to cool the composition (Col. 5, lines 55-59). Kuboyama does not expressly teach the solidification of the liquid extract by providing

an absorbent material, contacting the liquid with the absorbent material and drying the wetted absorbent material.

Howland teaches a method of solidifying a raw material extract from an aqueous extract obtained by conventional methods by drying using conventional methods such as freeze-drying or spray drying (Col. 2, lines 50-61). The extract solution to be solidified is mixed with a fixative and dried (Col. 3, lines 5-49). The fixative can be dextrins, corn syrup, corn syrup solids, dextrose, lactose and gums or the fixative can be natural materials (Col. 3, line 62 – Col. 4, line 19). The solid obtained from this method can later be reconstituted with water to form a drink wherein the extract is releases from the fixative imparting the benefits of the extract (Col. 3, lines 38-42).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to extract from a raw material an extract by the method Kuboyama and solidified the liquid extract by the method of Howland. While the reference does not teach the complete temperature range, differences in temperature will not support the patentability of subject matter encompassed by the prior art unless there is evidence indicating such temperature is critical. Where the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation. *In re Aller*, 220 F.2d 454, 105 USPQ 233, 235 (CCPA 1955). The prior art teaches the extract can be formed by freeze drying. The reference does not teach the exact concentration range of the instant claims. It is the position of the examiner that no particular criticality is seen in the particular claimed

temperature range. Freeze-drying is known as a method solidifying an extract and the temperature range is one that is typical in the art.

One of ordinary skill in the art would have been motivated to solidify the liquid extract of Kuboyama to facilitate recovery of extract components and to supply sufficient solids content so that almost complete recovery and retention of the extract is achieved (Howland, Col. 3,lines 43-49). One of ordinary skill would also be motivated to solidify the extracts to ensure stability of the product during storage (Howland, Col. 1,lines 44-47).

Therefore, the invention as a whole would have been *prima facie* obvious to one of ordinary skill in the art at the time the invention was made.

Claims 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kuboyama (US 5558006) in combination with Howland et al. (US 4045586) in further combination with Zoubek et al. (US 5114722). The teachings of Kuboyama and Howland are discussed above. Howland does not teach that the fixative or absorbent material is polyvinylidene fluoride or glass fibers.

Zoubek teaches that polyvinylidene fluoride and glass fiber filters are known materials in the art of filtration and extraction (Col. 1, line 63 0 Col. 2, line 8).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to use the materials of Zoubek in the methods of Kuboyama and Howland. The selection of known material based on its suitability for its intended use is obvious absent a clear showing of unexpected results attributable to the applicants' specific selection.

One of ordinary skill in the art would have been motivated to do this to isolate the extract and form a dry solid of the extract.

Therefore, the invention as a whole would have been *prima facie* obvious to one of ordinary skill in the art at the time the invention was made.

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kuboyama (US 5558006) in combination with Howland et al. (US 4045586) in further combination with Mizusawa et al. (US 5231193). The teachings of Kuboyama and Howland are discussed above. Howland does not teach that the fixative or absorbent material comprises cellulose.

Mizusawa teaches the use of a paper filter in the extraction process of the art (Col. 5, Example 4).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to use the materials of Mizusawa in the methods of Kuboyama and Howland. The selection of known material based on its suitability for its intended use is obvious absent a clear showing of unexpected results attributable to the applicants' specific selection.

One of ordinary skill in the art would have been motivated to do this to isolate materials from a solution.

Therefore, the invention as a whole would have been *prima facie* obvious to one of ordinary skill in the art at the time the invention was made.

Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kuboyama (US 5558006) in combination with Howland et al. (US 4045586) in further

combination with Tircot (US 4506510). The teachings of Kuboyama and Howland are discussed above. The Kuboyama reference does not teach the inclusion of a heat sink with the condensing chamber.

Tircot teaches a condensing chamber in which one or more thermoelectric coolers are contained that further comprise a heat sink (Claim 1).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to include a heat sink in the condensing chamber.

One of ordinary skill in the art would have been motivated to do this to prevent the icing up of the walls of the device.

Therefore, the invention as a whole would have been *prima facie* obvious to one of ordinary skill in the art at the time the invention was made.

Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert M. Joynes whose telephone number is (703) 308-8869. The examiner can normally be reached on Mon.-Thurs. 8:30 - 6:00, alternate Fri. 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thurman K. Page can be reached on (703) 308-2927. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-3592 for regular communications and (703) 305-3592 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1235.

Robert M. Joynes
Patent Examiner
Art Unit 1615
May 4, 2003

THURMAN K. PAGE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1600